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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

ALSTRUM ACEVEDO, JAMES HENRY

ART UNIT PAPER NUMBER

1616

DATE MAILED: 02/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/767,189	Applicant(s) PANTINI, GIOVANNI	
	Examiner James H. Alstrum-Acevedo	Art Unit 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 21-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 21-25 is/are rejected.
- 7) ☒ Claim(s) 2,3,8 and 21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/30/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-11 and 21-25 are pending.

Specification

The disclosure is objected to because of the following informalities: the chemical names “propylene glycol” and “dipropylene glycol” are misspelled as “propylenglycol” and “dipropylenglycol” in the first paragraph beginning on page 7 of the specification.

Appropriate correction is required.

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claims 2, 3, 8, and 21 are objected to because of the following informalities: claim 2 requires the insertion of a comma on line 2 between “(I)” and “Z₁”; the indefinite article, “a,” should be inserted in claim 3, line 19 between the words “has” and “number;” the chemical names – “propylene glycol” and “dipropylene glycol”- are misspelled as “propylenglycol (line 3) and “dipropylenglycol” (lines 6 and 7), respectfully; it appears that the letter “C” has been erroneously omitted on line 2 of claim 21 between the number “4” and the word “atoms.”

Appropriate correction is required.

The use of the trademarks PEMULEN[®] (pg 10, 3rd paragraph; Example 18); FOMBLIN[®] (1st paragraph beginning on page 16; Examples 1-4, 9-13, 17-20, and 23-27); CARBOPOL[®] (Examples 11, 12, and 26); RHODICARE[®] (Examples 13, 17, and 27); DECUBAL[®] (Example

14 and Tables 2-4); and ZETESAP[®] (Example 21) has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner, which might adversely affect their validity as trademarks.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 1-11 and 21-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 3, 4, 7, and 11 are indefinite because they include the prefix “per” within parentheses. The use of parentheses in this instance leads to ambiguity, as it is unclear whether the prefix “per” is intended as an example or as an additional claim limitation.

Claims 1, 6, and 7 are rejected for being vague and indefinite, because the prefix “perfluoro” means that fluorine atoms have been substituted for hydrogen atoms *at every possible location*. The definition of “L” depicted in formula (I) is in disagreement with the meaning of “perfluoro” because it contains hydrogen atoms, which a person of ordinary skill in the art would have expected to be substituted with fluorine atoms, based on the accepted meaning of the prefix “perfluoro.”

Claim 6 is indefinite for the use of the conjunction "and/or," because it is unclear what are the intended claim limitations.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 1 recites the broad recitations (1) "L is a bivalent linking group" and (2) "n is an integer in the range 1-50" and the claim also recites (1) "preferably of the $(\text{CHR}_1\text{CHR}_2\text{O})_n$ type..." and (2) "preferably 1-6" which are narrower statements of these ranges/limitations.

The term "concentrated" in claims 1 and 11 is a relative term, which renders the claim indefinite. The term "concentrated" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The term "concentrated" implies the presence of a greater amount of a given solute (or other species) per unit volume or mass than is present in another instance. Therefore, a person of ordinary skill in the art at the time of the

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instant application would be unable to ascertain what Applicant meant by the term "concentrated composition," because no comparison standard or definition has been provided to ascertain whether a given sample has a greater amount of a given solute (or other species) per unit volume or mass than is present in another sample.

The remaining claims are rejected as being dependent upon a rejected claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

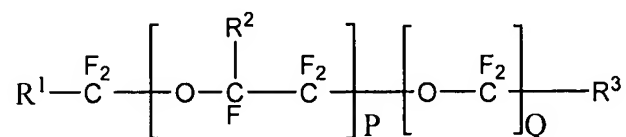
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invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-8 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto (JP 9-111286; IDS).

The chemical structure of component A of the claimed compositions is interpreted in adherence with the accepted meaning of the prefix “perfluoro” regarding the polyether moieties. Furthermore, the limitation that L is preferably a group of the formula $(\text{CHR}_1\text{CHR}_2\text{O})_n$ type is given no weight, because this L-limitation contradicts the accepted meaning of “perfluoropolyether” and it is an improper limitation within a limitation. Therefore, claim 1 and relevant dependent claims (e.g. claim 7) are interpreted as requiring that L is a perfluorinated polyether bivalent linking group. Contradictory definitions of the identity of the L linker are given no weight.

Hashimoto teaches a perfluoropolyether phosphate surface-active agent in claim 1 having the general formula:



wherein R^1 is F or a hydrophilic group; R^2 is F or CF_3 ; R^3 is the hydrophilic group; p and q are integers from 0-1000 (preferably P or Q is 0); and each of the oxyperfluoro groups can be arranged alternately for alternate polymerization. Hashimoto discloses in claim 2 that R^3 may be selected from COOM (M represents H, NH_4 , and alkaline metal), $\text{CONHC}_6\text{H}_3(\text{CH}_3)\text{NHCO}$, CH_2OH , $\text{CH}_2\text{OCH}_2\text{CH}_2)_n\text{OH}$ (n is an integer from 1-100), OSO_3M (M is as described

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previously), $(\text{CH}_2\text{CH}_2\text{O})_n\text{CH}_2\text{COOM}$ (M is as described previously), PO_4X_2 (**X is H, NH_4 , and alkaline metal, or $\text{CF}_3-(\text{O}-\text{CF}_2-\text{CF}_2)_s-(\text{O}-\text{CF}_2)_t$; s and t are integers from 0-1000, preferably, either s or t is zero**).

Hashimoto teaches in paragraph [0015] that the perfluoro polyether surface-active agent (surfactant) is compatible with alcohol and that by adding alcohol a more stable emulsion is obtained.

Hashimoto teaches in [0018] that Audimont Co. sells MF201, a commercially available perfluoropolyether surfactant (sodium perfluoropolyether phosphate).

Hashimoto teaches in [0025] that Audimont sells FONBRIN HC-04, which is an exemplary commercially available perfluoropolyether that is compatible with oil, **water, methanol, ethanol, isopropanol, propylene glycol**, etc. [0026]. In [0029], Hashimoto indicates that the surfactant and oil agent are mixed with an alcohol, preferably with addition of the alcohol to the surfactant prior to the addition of the oil agent. In Table 1, Hashimoto indicates that water may be included in a composition comprising a perfluoropolyether phosphate and that this table is merely exemplary (see [0034]). Table 1 indicates that sodium perfluoropolyether phosphate may be used in an amount of 6% w/w in a composition comprising 50% w/w purified water.

It would have been obvious to a person of ordinary skill in the art at the time of the instant invention that one could include both water and an alcohol solvent in a composition comprising a perfluoropolyether phosphate surfactant, because Hashimoto teaches that his invented perfluoropolyether phosphate is compatible with oil, water, methanol, ethanol, isopropanol, propylene glycol, etc. Although Hashimoto does not explicitly teach number

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average molecular weight values (\overline{M}_n) for his invented perfluoropolyether phosphates, it is obvious that compounds described by the formula in claim 1 of JP 9-111286 would have \overline{M}_n values in the range of 800-2,500 g/mol.

Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto (JP 9-111286; IDS) as applied to claims 1-8 and 23-24 above, and further in view of Brunetta (U.S. Patent No. 4,803,067).

The chemical structure of component A of the claimed compositions is interpreted in adherence with the accepted meaning of the prefix “perfluoro” regarding the polyether moieties. Furthermore, the limitation that L is preferably a group of the formula $(\text{CHR}_1\text{CHR}_2\text{O})_n$ type is given no weight, because this L-limitation contradicts the accepted meaning of “perfluoropolyether” and it is an improper limitation within a limitation. Therefore, claim 1 and relevant dependent claims are interpreted as requiring that L is a perfluorinated polyether bivalent linking group. Contradictory definitions of the identity of the L linker are given no weight.

The teachings of Hashimoto have been set forth above.

Hashimoto lacks the teaching of specific amounts of perfluoropolyether, solvent, and water.

Brunetta teaches cosmetic compositions comprising a perfluoropolyether liquid dispersed in an oil/water or water/oil emulsion, or in a solid phase suited to form a gel suspended in an organic liquid phase (abstract).

Brunetta teaches in the first table of column 6 a composition comprising 70 parts water, 4 parts glycerine (i.e. glycerol) and 1-5 parts perfluoropolyether (Fomblin Y). Glycerol is a three

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carbon linear alcohol having three hydroxyl moieties and is therefore obvious over propanol, a linear three-carbon monoalcohol (i.e. only one hydroxyl group).

It would have been obvious to combine the teachings of Hashimoto and Brunetta, because both inventors teach compositions comprising a perfluoropolyether compound. Brunetta teaches an amount of perfluoropolyether up to 5%, water ranging from 70-76.5%, and glycerine ranging from 4-5 %, which are amounts within the stated range of the amount of components A, B, and C in claim 9 of the instant application. Regarding the amounts stated in claim 10, the amount of a specific ingredient in a composition is clearly a result effective parameter that a person of ordinary skill in the art would routinely optimize. Optimization of parameters is a routine practice that would be obvious for a person of ordinary skill in the art to employ. It would have been customary for an artisan of ordinary skill to determine the optimal amount of each ingredient needed to achieve the desired results. Thus, absent some demonstration of unexpected results from the claimed parameters, the optimization of ingredient amounts would have been obvious at the time of applicant's invention.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting

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ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-10, 21, 22, and 24 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3 and 15-19 of U.S. Patent No. 6,699,485 (USPN '485). Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-3 and 15-19 of USPN '485 anticipate and are generic to all that is recited in the cited claims of the instant application. The difference between the claim sets is that the cited claims of the instant application are drawn to "concentrated compositions," whereas those of USPN '485 are drawn to cosmetic formulations. However, the Examiner contends that the terms "formulations" and "compositions" mutually encompass one another. Therefore, it is not important if one composition is called a cosmetic, so long as both compositions comprise the same or components, then one claim set anticipates the other, such as in the instant rejection. Specifically, claim 1 of USPN '485 recites the same components as claim 1 of the instant application: (A) perfluoropolyether phosphate having the same general formula and linking group formula; (B) solvent; and (C) water. The limitations of the remaining dependent claims of the instant application are contained in claim 1 or the cited dependent claims of USPN '485.

Other Matter

The Examiner respectfully suggests rewording every occurrence of the phrase "selected from one or more of the following ones" in the instant claims to read "to one or more [the species to be selected, such as "solvent" or "repeat unit"] selected from the group consisting of

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[list the members of the group]. The Examiner noted that the method of claim 11 utilizes bullets to differentiate the different steps, however, this is properly done using either letters or numbers within parentheses. The Examiner respectfully suggests, rewriting claim 11 to replace the bullets with numbers or letters in parentheses to indicate the different steps of the method.

Conclusion

The specification and claims 2, 3, 8, and 21 are objected. All claims are rejected. No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James H. Alstrum-Acevedo whose telephone number is (571) 272-5548. The examiner can normally be reached on M-F, 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Kunz can be reached on (571) 272-0887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James H. Alstrum-Acevedo, Ph.D.
Examiner


MICHAEL HARTLEY
PRIMARY EXAMINER